0057537

099774

# DISTRIBUTION
# UNIT MANGERS' MEETING
# 200 AREA GROUNDWATER AND SOURCE OPERABLE UNITS

Bryan Foley ..... DOE-RL RP (A5-13)
Marvin Furman ..... DOE-RL RP (A5-13)
Ellen Mattlin ..... DOE-RL EAP (A2-15)
Mike Thompson ..... DOE-RL RP (A5-13)
Arlene Tortoso ..... DOE-RL RP (H0-12)
Lisa Treichel ..... DOE-HQ (EM-442)

Dennis Faulk ..... EPA (B5-01)

Brenda Becker-Khaleel ..... WDOE (Kennewick) (B5-18)
Zelma Maine ..... WDOE (Kennewick) (B5-18)
Tina Masterson-Heggen ..... WDOE (Kennewick) (B5-18)
John Price ..... WDOE (Kennewick) (B5-18)
Matt Mills ..... WDOE (Kennewick) (B5-18)

Lynn Curry ..... BHI (H0-19)
Garrett Day ..... BHI (H0-19)
Bruce Ford ..... BHI (H0-21)
Alison Kent ..... BHI (H0-21)
Greg Mitchem ..... BHI (H0-19)
Joan Woolard ..... BHI (H0-02)

Tim Lee ..... CHI (H9-02)
Virginia Rohay ..... CHI (H0-19)
L. Craig Swanson ..... CHI (H9-02)
Mary Todd ..... CHI (H9-03)
Curtis Wittreich ..... CHI (H9-03)

Stuart Luttrell ..... PNNL (K6-96)
Mark Sweeney ..... PNNL (K6-81)

Administrative Record (2) ..... BHI (H0-09)

Please inform Alison Kent – BHI (372-9192)
of deletions or additions to the distribution list.

**Meeting Minutes Transmittal/Approval**
**Unit Managers' Meeting**
**200 Area Groundwater and Source Operable Units**
**3350 George Washington Way, Richland, Washington**
**JUNE 2001**

---

APPROVAL: _____ Date Aug 27 2001
Bryan Foley, 200 Area Unit Manager, DOE/RL (A5-13)

APPROVAL: _____ Date 8/29/01
Arlene Tortoso, Groundwater Unit Manager, DOE/RL (H0-12)

APPROVAL: _____ Date 11-15-01
Dennis Faulk, 200 Area Unit Manager, EPA (B5-01)

APPROVAL: _____ Date 6-4-02
John Price, 200 Area Unit Manager, Ecology (B5-18)

Meeting minutes are attached. Minutes are comprised of the following:

| | | |
|---|---|---|
| Attachment 1 | -- | Agenda |
| Attachment 2 | -- | Attendance Record |
| Attachment 3 | -- | 200 Area Current Action Log |
| Attachment 4 | -- | 200 Area UMM Minutes – JUNE 2001 |
| Attachment 5 | -- | Draft Well 299-W15-84 Soil Vapor Analysis |
| Attachment 6 | -- | Preliminary Soil Vapor Extraction System Data for April through June 2001 |
| Attachment 7 | -- | Carbon Tetrachloride Soil Vapor Monitoring Data for July 1999 through May 2001 |
| Attachment 8 | -- | 200-TW-1 and 200-TW-2 Drilling Schedule (FY01) |

Prepared by: _____ Date 8-29-01
Alison Kent, BHI GW/VZ Integration Project (H0-21)

Concurrence by: _____ Date 8-29-01
Bruce Ford, BHI GW/VZ Integration Project (H0-21)

# UNIT MANAGERS' MEETING AGENDA

**3350 George Washington Way**
**June 28, 2001**

**9:00 a.m. – 11:00 a.m.** **200 Area** **Room 1B45**

**General (10 minutes)**

- Outstanding Action Items (attached)
- Open for regulatory topics or action items.
- Performance Reporting evaluation (RODs and RDR/RAWP)
- Review of Land Use Presentation to HAB

**200-UP-1 (10 minutes)**

- Operations Status
- Monitoring Well Installation status
- System enhancements update (CERCLA 5-Year review)

**200-ZP-1 (10 minutes)**

- Operations Status
- PFP Well Installation update
- Offsite waste determination needs

**200-ZP-2 (PW-1) (10 minutes)**

- Operations Status
- Z-9 Well deepening status including preliminary data evaluation
- Offsite waste determination needs

**200-PW-1 Plutonium/Organic-Rich Process Waste OU (10 minutes)**

- Work Plan Status
- Dispersed CCl4 Plume DQO Status and Schedule

**200-CW-1 Gable/B Pond and Ditches Cooling Water OU (5 minutes)**

- Feasibility Study Status

**200-CS-1 Chemical Sewer OU (5 minutes)**

- Status of 216-A-29 Ditch Sampling Activity

**200-TW-1 Scavenged and 200-TW-2 Tank Waste OUs (10 minutes)**

- Status of Field Activities
- Completion Documentation for Milestones M-15-41A and M-15-42A

**200-PW-2 Uranium-Rich Process Waste OU (5 minutes)**

- Status of Workplan
- Status of TPA Change Packages
  - M-15-00-06
  - M-20-01-01
  - M-13-XX-XX (addresses M-13-00L)

# Groundwater and Source Operable Units Unit Managers' Meeting
## Official Attendance Record – 200 Area
## June 28, 2001

*Please print clearly and use black ink*

| PRINTED NAME | ORGANIZATION | O.U. ROLE | TELEPHONE |
|---|---|---|---|
| Matt Mills | Ecology | CS - 1 | 736-5721 |
| Arlene Tortoso | DOE | GW Remediation PM | 373-9631 |
| Dennis Faulk | EPA | RPM | 376-8631 |
| Zelma Jackson | Ecology | UP-1 | 736-3024 |
| Stuart Luttrell | PNNL | GW Mon. | 376-6023 |
| Mark Byrnes | BHI | UP-1 | 372-9267 |
| Garrett Day | BHI | Groundwater treatment | 372-9571 |
| MARY TODD | CHI | CW-1, TW-1, TW-2 200 Area Eco | 372-9631 |
| Ron Jackson | BHI | TL | 372-3543 |
| Bryan Foley | DOE-RL | 200 Area | 376-7087 |
| Curt Wittreich | CHI | 200 Area | 372-9586 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

## 200 Area Unit Managers' Meeting
## OPEN ACTION ITEMS & TRACKING

| Action # | Action/Subject | Assigned To | Owed To | Assigned Date | Original Due Date | Adjusted Due Date | Date Complete | Status |
|---|---|---|---|---|---|---|---|---|
| 15 | 200 Area Implementation Plan Ecology comment response letter | Bryan Foley, RL | John Price, Ecology | 01/18/2000 | | TBD | | |

Attachment 3

# MEETING MINUTES
# 200 AREA GROUNDWATER AND SOURCE OPERABLE UNITS
# UNIT MANAGERS' MEETING -- 200 AREA
# June 28, 2001

**Attendees:** See Attachment #2

**Agenda:** See Attachment #1

**Topics of Discussion:**

***1. General***

- Outstanding Action Items – The action item tracking log was reviewed. EPA stated that the minutes of the preceding meetings have not been distributed for approximately six months and requests that an action item be added to the tracking log. (see attached).

- Open for Regulatory Topics or Action Items – Stuart Luttrell asked for input from EPA and Ecology as to the expected scope of the Monitoring Plans for BP-5 and PO-1, respectively. EPA recommends starting from the beginning, selecting key wells for the CERCLA network, so that a comprehensive well network is established that covers the entire operating unit, including RCRA sites.

  Plans for UP-1 and ZP-1 are due in December. EPA expects to have those plans by December 31, 2001. In order to meet that December date, EPA recommends starting in August. EPA requested a status on the path forward on UP-1 and ZP-1.

- Performance Reporting Evaluation (RODs and RDR/RAWP) – The RDR/RAWPs and RODs are being reviewed.

- Review of Land Use Presentation to HAB – The presentation went well. They are working with the committee now and are considering holding a workshop with the full HAB board.

***2. 200-UP-1***

- Operations Status – An effort has been made to increase the pumping rate to more than 50 gallons per minute. Well maintenance is being scheduled and the pump will be pulled and lowered if needed to maintain flow.

- Monitoring Well Installation Status – The contractor is mobilizing at the monitoring well location.

- System Enhancements Update – The UP-1 system enhancement designs are proceeding to be completed in FY01. Field construction is to start in FY02.

### 3. *200-ZP-1*

- Operations Status – The wells are operating at 175 – 180 gallons per minute. The W15-33 well has been difficult to control because of lower flow. Improvements are being made. Algae build up has not been a concern this spring. We will wait and see.

- PFP Well Installation Update – The DQO was just revised and is in internal BHI review. Following internal review, it will be ready for DOE/RL and EPA to review. Input from the strawman meeting was used in the revision. Installation is scheduled for August. EPA stated that when the SAP is received, it will be forwarded to Joe Caggiano for review and a variance may be done. Comments on the DQO were requested to be out in a week. EPA will send a letter, no approval page is needed.

- Offsite Waste Determination Needs – A date of July 12, 2001 was given for determination for offsite waste. Another request will be sent to EPA after that.

### 4. *200-ZP-2*

- Operations Status – There are some pressure transmitter problems with the SVE system, it's under review. We will move from Z1-A to the next set of wells, probably around Z-9. A handout was distributed reflecting the Z1-A data information. Analysis of GAC is being done monthly and Virginia Rohay will get an evaluation of it out soon.

- Z-9 Well Deepening Status Including Preliminary Data Evaluation – Well deepening was completed on June 15, 2001 and it is ready for use. A handout on soil vapor analysis was distributed showing concentrations in the soil vapor. For well 84, the highest concentrations were found in the Plio Pleistocene. Below the caliche, the concentrations dropped off and then the concentrations picked-up again in the lower portion of the well. Groundwater is at approximately 230 feet. For well 95, the highest levels of carbon tetrachloride are in the sandy gravel below the Plio Pleistocene. The difference between the two wells is very interesting. The packer test really helped. On the first well, a ribbon was not used because of integrated sampling with PNNL. A ribbon was used on the second well.

- Offsite Waste Determination Needs – A date of July 12, 2001 was given for termination for offsite waste. Another request will be sent to EPA after that.

### 5. *200-PW-1 Plutonium/Organic-Rich Process Waste OU*

- Work Plan Status – We are proceeding with the DQO. We will start on the Work Plan when the DQO is wrapped up.

- Dispersed CC14 Plume DQO Status and Schedule – Briefings are scheduled with DOE/RL and EPA in July. The technical team would like to have an interim meeting before that. EPA asked how the NETL work would be incorporated into the Work Plan.

### 6. *200-CW-1 Gable/B Pond and Ditches Cooling Water OU*

- Feasibility Study Status – Evaluations on waste sites inside the exclusive-use boundary are proceeding. The focus is on modeling of the B Pond. After B Pond, the Gable Mountain Pond and one of the ditches will be modeled. Portions of the document that deal with the waste sites inside the boundary have been partially drafted. The document is due to Ecology March 2003. Ecological sampling will start next spring; the DQO will begin in December.

### 7. *200-CS-1 Chemical Sewer OU*

- Status of 216-A-29 Ditch Sampling Activity – A Statement of Work was received from CH2M Hill Hanford Group (CHG) for the sampling at the A-29 Ditch. Deliverable dates have been adjusted to account for the slip in schedule based on the July 2, 2001, start date. The SAP is due to be delivered to CHG on August 9, 2001.

### 8. *200-TW-1 Scavenged and 200-TW-2 Tank Waste OUs*

- Status of Field Activities – Craig Cameron needs to be included in distribution. A drilling schedule was handed out. Drilling is being done on the night shift (9:30 pm to 8:00 am). The best time to visit is early in the morning. The drilling is down to 47 feet at T-26 as of the end of the shift on 6/28. Details are captured in the daily field reports. The borehole is expected to be finished in mid-July. At that time, drilling will move to B-38. Drive casings at B-38 will start this week and will be logged prior to selection of the B-38 borehole location. The M-15-41A and –42A TPA milestones require completion of the sample collection by the end of October.

- Completion Documentation for Milestones M-15-41A and M-15-42A – Documentation of the completion of the milestones can be accomplished by a letter sent to EPA.

### 9. *200-PW-2 Uranium-Rich Process Waste OU*

- Status of the Workplan – The transmittal letter is being revised. The PW-2 Work Plan, Rev. 0, will be sent with a transmittal letter that contains a commitment to provide a draft of all the M-20 modifications as well as the M-13-00L change request by August. This should be through DOE/RL by next week.

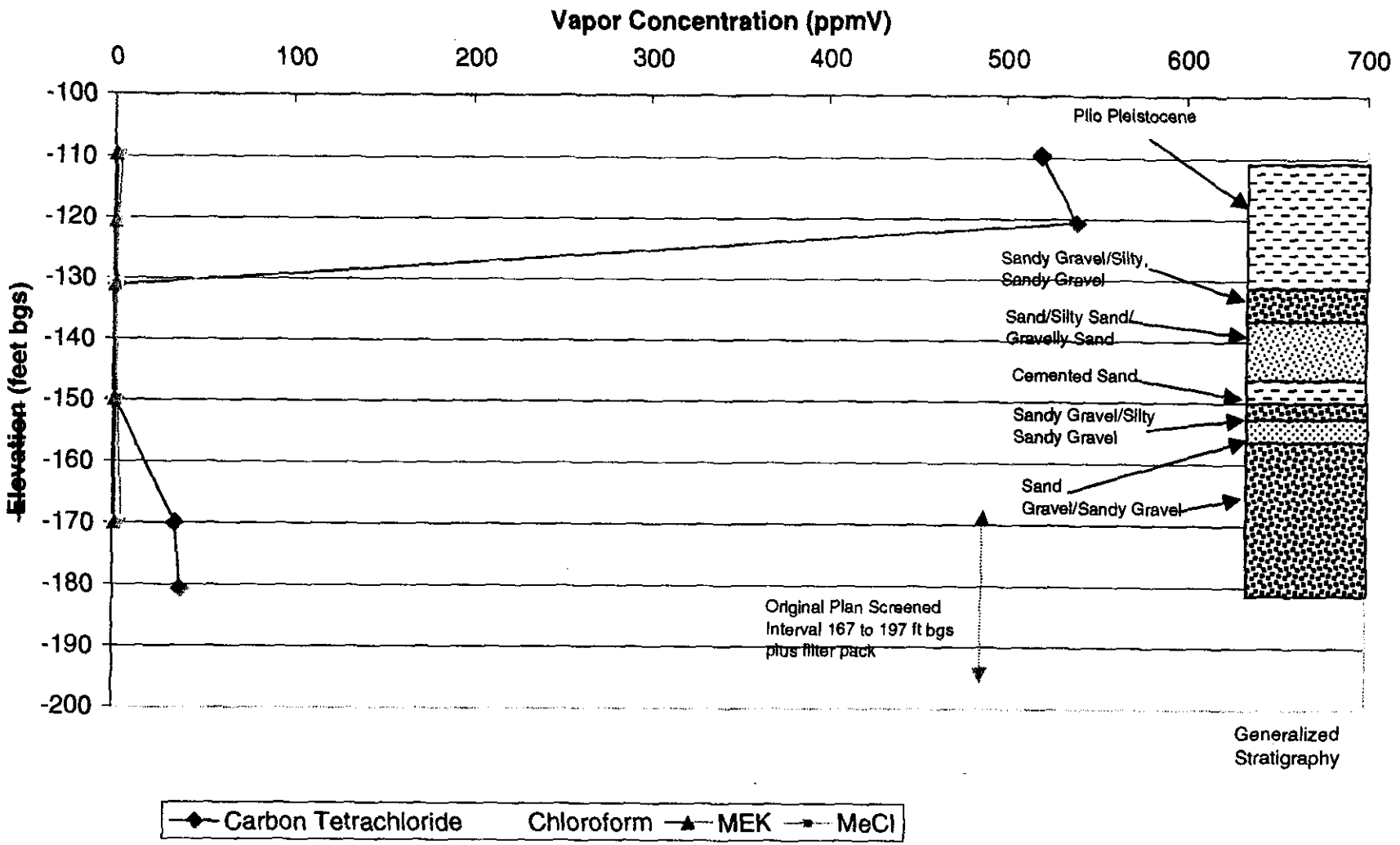
- Status of TPA Change Packages –

  - M-15-00-06 – Will be transmitted with the work plan.

  - M-13-XX-XX (addresses M-13-00L) – EPA requested that the M-13-00L be sent in draft form.

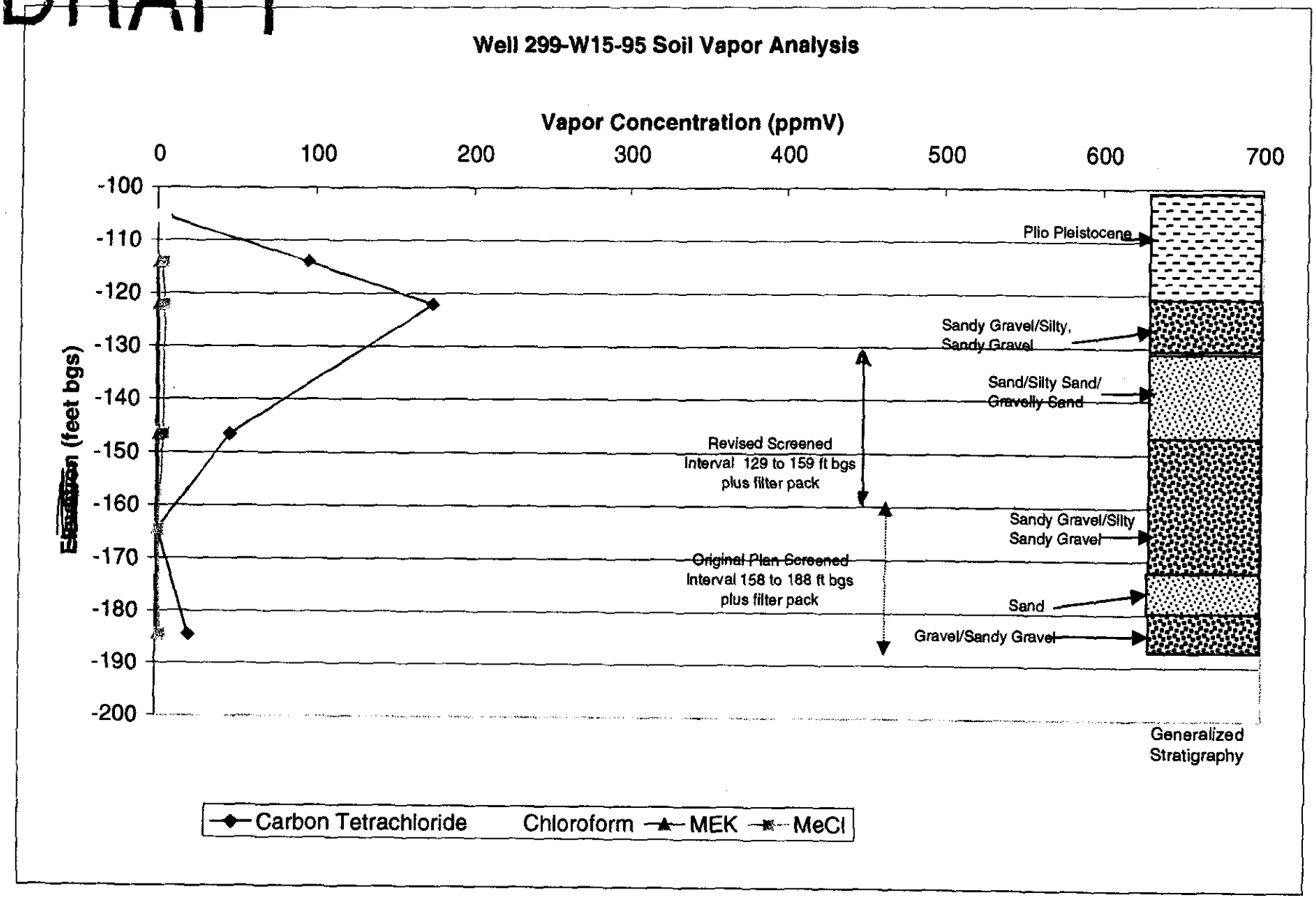
DRAFT

## Well 299-W15-84 Soil Vapor Analysis

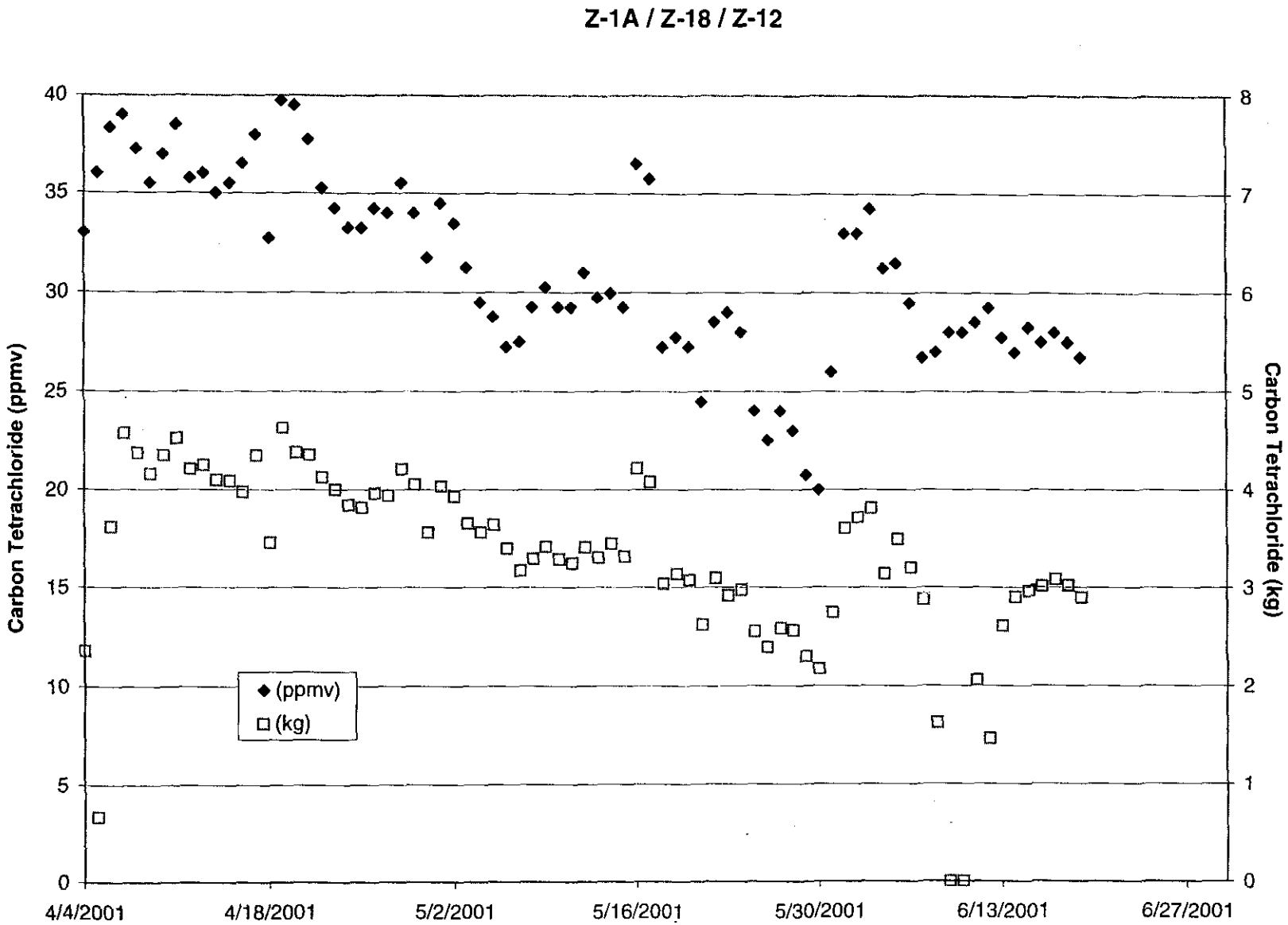



Attachment 5

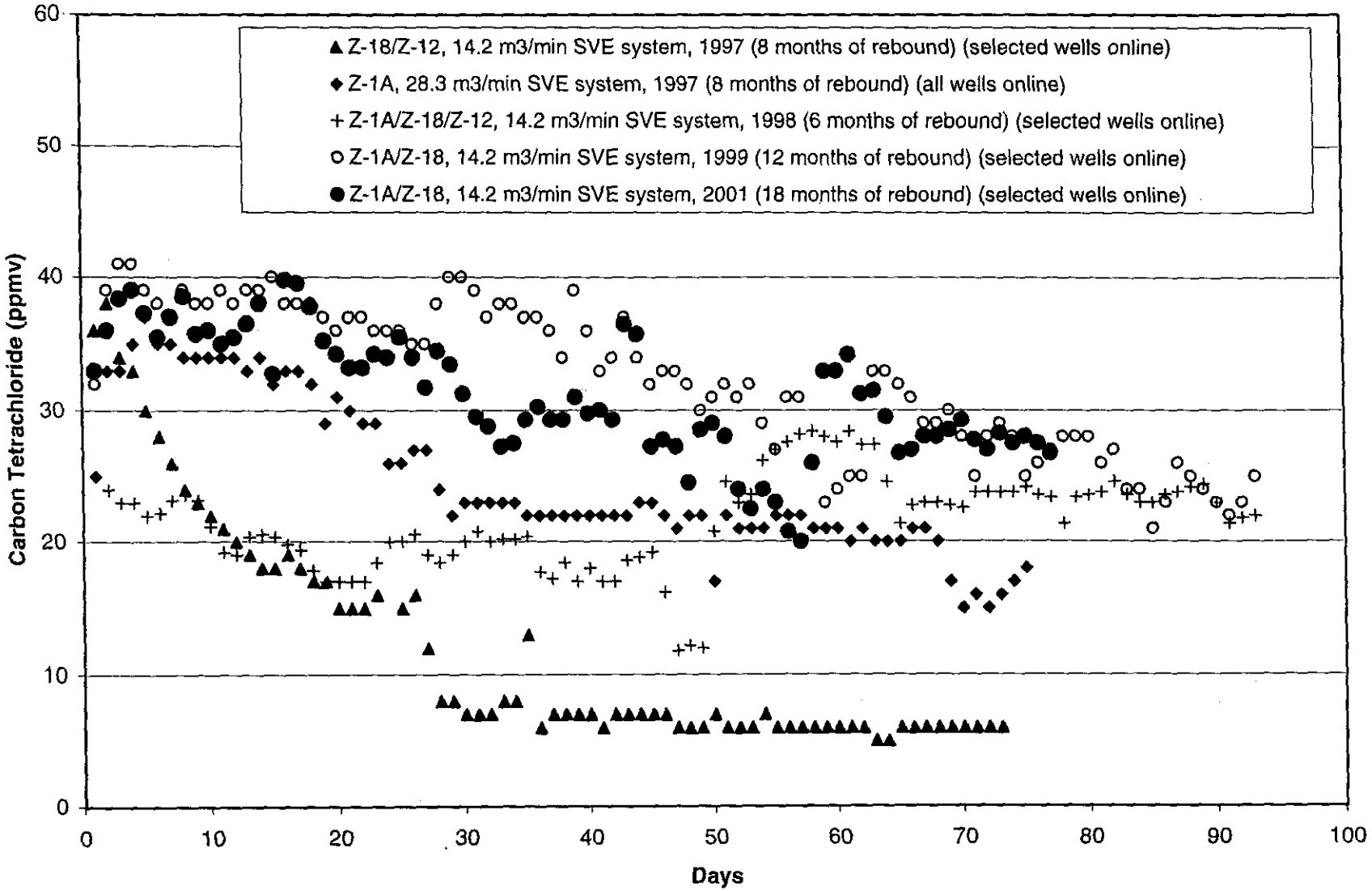
DRAFT




Attachment 5




Attachment 6




Attachment 6

cf01to99to98to97.xls: allZ-1A

# Comparison of Maximum Carbon Tetrachloride Rebound Concentrations Monitored at 200-PW-1 (200-ZP-2) Soil Vapor Extraction Sites FY 1997 - FY 2001

| 200-PW-1 | | | November 1996 - | | October 1997 - | | July 1998 - | | July 1999 - | |
|---|---|---|---|---|---|---|---|---|---|---|
| (200-ZP-2) | | | July 1997 | | September 1998 | | September 1999 | | May 2001 | |
| Location | Site | Zone | Maximum Rebound | months* | Maximum Rebound | months* | Maximum Rebound | months* | Maximum Rebound | months* |
| (Well or Probe) | | | Carbon Tetrachlorid | of | Carbon Tetrachlorid | of | Carbon Tetrachlorid | of | Carbon Tetrachlorid | of |
| /feet bgs | | | (ppmv) | rebound | (ppmv) | rebound | (ppmv) | rebound | (ppmv) | rebound |
| 79-03/ 5 ft | Z-18 | 1 | 0 | 8 | 0 | 3 | 0 | 12 | | |
| 79-06/ 5 ft | Z-1A | 1 | not measured | | not measured | | 1.4 | 12 | | |
| 79-11/ 5 ft | Z-1A | 1 | 0 | 8 | 0 | 6 | 2.9 | 12 | | |
| 86-05/ 5 ft | Z-9 | 1 | not measured | | not measured | | 0 | 3 | | |
| 86-05-01/ 5 ft | Z-9 | 1 | not measured | | not measured | | 0 | 3 | | |
| 86-06/ 5 ft | Z-9 | 1 | 1.3 | 8 | 0 | 9 | 1.9 | 6 | | |
| 87-05/ 5 ft | Z-1A | 1 | not measured | | 0 | 3 | 1.0 | 12 | | |
| 87-09/ 5 ft | Z-1A | 1 | not measured | | 1.5 | 3 | 2.6 | 12 | | |
| 94-02/ 5 ft | Z-9 | 1 | 0 | 8 | not measured | | 1.4 | 3 | | |
| 95-11/ 5 ft | Z-9 | 1 | 0 | 8 | 2.1 | 9 | 2.5 | 6 | | |
| 95-12/ 5 ft | Z-9 | 1 | 1.1 | 8 | 1.5 | 9 | 1.3 | 6 | | |
| 95-14/ 5 ft | Z-9 | 1 | not measured | | not measured | | 0 | 3 | | |
| CPT-13A/ 9 ft | Z-1A | 2 | not measured | | 0 | 6 | 1.0 | 12 | | |
| CPT-16/ 10 ft | Z-9 | 2 | not measured | | 0 | 9 | 1.5 | 6 | | |
| CPT-17/ 10 ft | Z-9 | 2 | not measured | | 4.2 | 9 | 5.1 | 6 | 6.6 | 23 |
| CPT-18/ 15 ft | Z-9 | 2 | not measured | | 6.5 | 9 | 5.0 | 6 | 5.2 | 23 |
| CPT-31/25 ft | Z-1A | 2 | not measured | | 0 | 6 | 0 | 12 | | |
| CPT-16/ 25 ft | Z-9 | 2 | not measured | | not measured | | not measured | | 1.8 | 23 |
| CPT-32/ 25 ft | Z-1A | 2 | not measured | | 9.1 | 6 | 10 | 12 | 16.5 | 18 |
| CPT-4A/ 25 ft | Z-1A | 2 | not measured | | not measured | | not measured | | 3.5 | 0 |
| CPT-30/ 28 ft | Z-18 | 2 | not measured | | not measured | | 3.2 | 12 | 1.4 | 18 |
| CPT-13A/ 30 ft | Z-1A | 2 | 2.2 | 8 | not measured | | not measured | | 3.6 | 18 |
| CPT-7A/ 32 ft | Z-1A | 2 | not measured | | 2.3 | 6 | 5.4 | 12 | 6.2 | 18 |
| CPT-27/ 33 ft | Z-9 | 2 | 1.2 | 8 | not measured | | not measured | | 2.6 | 23 |
| CPT-1A/ 35 ft | Z-18 | 2 | 2.0 | 8 | 1.4 | 3 | 3.0 | 12 | 5.1 | 18 |
| CPT-33/ 40 ft | Z-1A | 2 | not measured | | 2.0 | 3 | 2.6 | 12 | | |
| CPT-34/ 40 ft | Z-18 | 2 | 2.3 | 8 | not measured | | 1.7 | 12 | 1.9 | 0 |
| CPT-21A/ 45 ft | Z-9 | 2 | 65.6 | 8 | 52.7 | 9 | 57 | 3 | 127 | 23 |
| W15-220ST/ 52 ft | Z-9 | 2 | 2 | 8 | not measured | | 1.6 | 3 | 2.5 | 23 |
| CPT-28/ 60 ft | Z-9 | 2 | not measured | | 1.5 | 0 | 3.7 | 3 | | |
| CPT-9A/ 60 ft | Z-9 | 2 | 45.5 | 8 | 41.1 | 0 | 44 | 3 | 68 | 23 |
| CPT-30/ 68 ft | Z-18 | 2 | 1.7 | 8 | not measured | | 3.0 | 12 | | |
| CPT-13A/ 70 ft | Z-1A | 2 | 5.2 | 8 | not measured | | 5.6 | 12 | | |
| CPT-24/70 ft | Z-9 | 2 | not measured | | 3.2 | 9 | 3.6 | 3 | | |
| W15-219SST/ 70 ft | Z-9 | 2 | 14.6 | 8 | not measured | | 7.6 | 3 | 7.7 | 23 |
| CPT-18/ 75 ft | Z-9 | 2 | not measured | | not measured | | not measured | | 18 | 23 |
| CPT-31/ 76 ft | Z-1A | 2 | 4.0 | 8 | not measured | | 4.2 | 12 | | |
| CPT-33/ 80 ft | Z-1A | 2 | 5.8 | 8 | not measured | | 9.2 | 12 | | |
| W15-82/ 82 ft | Z-9 | 2 | 28.9 | 8 | 5.5 | 9 | 46 | 6 | 55 | 23 |
| W15-95/ 82 ft | Z-9 | 2 | not measured | | 15.3 | 9 | 39 | 6 | 43 | 21 |
| CPT-21A/ 86 ft | Z-9 | 2 | 221 | 8 | 206 | 9 | 148 | 6 | 195 | 23 |
| CPT-34/ 86 ft | Z-18 | 2 | 36.3 | 8 | 5.9 | 3 | 0 | 12 | | |
| W15-218SST/ 86 ft | Z-9 | 2 | not measured | | not measured | | 0 | 3 | | |
| CPT-28/ 87 ft | Z-9 | 2 | 280 | 8 | 230 | 9 | 203 | 6 | 224 | 23 |
| CPT-1A/ 91 ft | Z-18 | 2 | 3.9 | 8 | not measured | | 4.2 | 12 | | |
| CPT-4A/ 91 ft | Z-1A | 2 | not measured | | 7.7 | 3 | 14 | 12 | | |
| CPT-9A/ 91 ft | Z-9 | 2 | 103 | 8 | 34.5 | 9 | 72 | 3 | | |
| W15-85/ 92 ft | Z-9 | 2 | not measured | | not measured | | not measured | | 51 | 23 |
| W18-252SST/ 100 f | Z-1A | 2 | 38.2 | 8 | 17.8 | 3 | 24 | 12 | | |
| W18-152/ 113 ft | Z-12 | 2 | 46.8 | 8 | 11.1 | 3 | 33 | 12 | 25 | 18 |
| W15-217/ 115 ft | Z-9 | 3 | 797 | 8 | 630 | 9 | 561 | 6 | 442 | 23 |
| CPT-24/ 118 ft | Z-9 | 3 | 44.6 | 8 | 37.7 | 9 | 37 | 6 | 35 | 23 |
| W15-220SST/ 118 f | Z-9 | 4 | 21.9 | 8 | not measured | | 36 | 3 | 34 | 23 |
| W18-158L/ 123 ft | Z-1A | 3 | not measured | | 143 | 3 | 492 | 12 | 284 | 18 |
| W18-167/ 123 ft | Z-1A | 3 | 323 | 8 | 79.7 | 3 | 228 | 12 | 248 | 18 |
| W15-219SST/ 130 f | Z-9 | 4 | 298 | 8 | not measured | | 47 | 3 | 54 | 23 |
| W18-249/ 134 ft | Z-18 | 3 | 206 | 8 | 20.4 | 3 | 215 | 12 | 176 | 18 |
| W18-248/ 136 ft | Z-1A | 3 | 288 | 8 | 86.3 | 3 | 177 | 12 | 214 | 18 |
| W15-219SST/ 155 f | Z-9 | 5 | 59.6 | 8 | not measured | | 24 | 3 | 44 | 23 |
| W15-220SST/ 185 f | Z-9 | 5 | 14.5 | 8 | not measured | | 13 | 3 | 15 | 23 |
| W15-6L/ 189 ft | Z-9 | 6 | 22.6 | 8 | 17.8 | 9 | 1.3 | 6 | | |
| W15-9L/ 189 ft | Z-9 | 6 | 18.3 | 8 | 15.0 | 9 | 15 | 6 | 20 | 21 |
| W18-7/ 200 ft | Z-1A | 6 | 28.5 | 8 | 17.3 | 3 | 29 | 12 | | |
| W18-6L/ 208 ft | Z-1A | 6 | 36 | 8 | 31.3 | 6 | 15 | 12 | | |
| W18-12/ 210 ft | Z-18 | 6 | not measured | | 3.8 | 3 | 19 | 12 | | |

* - based on location (Z-1A/18/12 or Z-9) of monitoring point; specific points may be beyond SVE zone of influence during particular operating configurations

- Z-18 and Z-12 wells off-line Oct 96 - Apr 98
- CPT-1A, CPT-9A, and possibly CPT-7A appeared to be beyond SVE zone of influence in Oct 96 based on differential pressure (BHI-01105, p. 6-1)
- CPT-9A, CPT-21A, CPT-28 beyond SVE zone of influence in May 96 based on CCl4 concentrations and airflow modeling based on measured vacuums (BHI-01105, p. 6-1)

Carbon Tetrachloride Rebound Concentrations
Monitored at 200-PW-1 (200-ZP-2) Soil Vapor Extraction Sites
July 1999 - May 2001

| 200-PW-1 (200-ZP-2) Location (Well or Probe) /feet bgs | Site | Zone | 07/30/99 CCl4 (ppmv) | 09/14/99 CCl4 (ppmv) | 9/28/99 CCl4 (ppmv) | 10/26/99 CCl4 (ppmv) | 11/30/99 CCl4 (ppmv) | 12/29/99 CCl4 (ppmv) | 01/25/00 CCl4 (ppmv) | 03/07/00 CCl4 (ppmv) | 06/02/2000 CCl4 (ppmv) | 06/27/2000 CCl4 (ppmv) | 07/24/2000 CCl4 (ppmv) | 08/29/2000 CCl4 (ppmv) | 09/25/2000 CCl4 (ppmv) | 10/31/2000 (b) CCl4 (ppmv) | 11/1/2000 (c) CCl4 (ppmv) | 11/28/2000 CCl4 (ppmv) | 12/29/2000 CCl4 (ppmv) | 02/12/2001 CCl4 (ppmv) | 02/28/2001 CCl4 (ppmv) | 03/20/2001 CCl4 (ppmv) | 04/30/2001 CCl4 (ppmv) | 05/30/2001 CCl4 (ppmv) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CPT-17/ 10 ft | Z-9 | 2 | 2.1 | 2.6 | 2.3 | 1.7 | 3.1 | 2.6 | 2.9 | 1.7 | 5.1 | 3.4 | 4.2 | 4.6 | 4.4 | 4.3 | | 3.7 | 5.2 | 4.8 | 5.7 | 5.3 | 6.6 | 5.1 |
| CPT-18/ 15 ft | Z-9 | 2 | 1.3 | 3.5 | 0 | 1.8 | 1.6 | 4.3 | 2.8 | 2.6 | 5.2 | 3.8 | 2.0 | 4.1 | 3.2 | 1.7 | | 2.1 | 3.0 | 2.3 | 1.5 | 1.5 | 3.2 | 2.0 |
| CPT-16/ 25 ft | Z-9 | 2 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 1.6 | 1.4 | 1.8 | 1.7 | 1.0 | | 0 | 1.5 | 1.1 | 1.5 | 1.3 | 1.3 | 0.0 |
| CPT-32/ 25 ft | Z-1A | 2 | | | | 0 | 0 | 1.5 | 3.8 | 9.4 | 8.6 | 7.2 | 8.1 | 6.6 | 6.4 | 6.3 | | 7.6 | 11.9 | 16.5 | 5.7 | 15.4 | | |
| CPT-4A/ 25 ft | Z-1A | 2 | | | | | | | | | | | | | | | | | | | | | 3.5 | 2.0 |
| CPT-30/ 28 ft | Z-1A | 2 | | | | 0 | 1.0 | 1.4 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0 | | 0 | 0 | 0 | 0 | 0 | | |
| CPT-13A/ 30 ft | Z-1A | 2 | | | | 0 | 0 | 1.6 | 1.1 | 2.1 | 2.5 | 3.4 | 2.5 | 3.4 | 2.6 | 2.4 | | 2.3 | 2.9 | 2.2 | 3.6 | 2.4 | 2.5 | 1.6 |
| CPT-7A/ 32 ft | Z-1A | 2 | | | | 2.3 | 1.9 | 2.8 | 2.3 | 4.4 | 4.7 | 6.2 | 3.9 | 4.3 | 3.9 | 4.3 | | 3.8 | 5.2 | 5.5 | 5.2 | 5.1 | 2.7 | 1.9 |
| CPT-27/ 33 ft | Z-9 | 2 | | | | 1.1 | 0 | 1.2 | 1.2 | 1.3 | 1.6 | 1.3 | 1.2 | 1.8 | 1.6 | 0 | | 1.2 | 2.6 | 2.3 | 2.6 | 2.0 | 2.6 | 1.4 |
| CPT-1A/ 35 ft | Z-12 | 2 | | | | 2.5 | 3.1 | 2.8 | 4.1 | 3.3 | 4.2 | 3.7 | 3.7 | 4.3 | 4.0 | 3.7 | | 5.1 | 4.9 | 3.0 | 4.6 | 4.2 | 4.8 | 3.0 |
| CPT-34/ 40 ft | Z-18 | 2 | | | | | | | | | | | | | | | | | | | | | 1.9 | 1.3 |
| CPT-21A/ 45 ft | Z-9 | 2 | 51.7 | 56.6 | 42 | 50.3 | 78 | 70.4 | 81.6 | 54.0 | 94 | 88.7 | 91.4 | 122 | 96.4 | 80.8 | | 84.4 | 92.8 | 81.6 | 86.8 | 65.8 | 127 | 86.8 |
| W15-220SST/ 52 | Z-9 | 2 | | | | | | | | | | | | | | | | | | | | | 2.5 | 1.9 |
| CPT-9A/ 60 ft | Z-9 | 2 | ----- (a) | 43.9 | 44.0 | 32.9 | 39.3 | 43.5 | 38.1 | 33.2 | 43.9 | 67.6 | 40.3 | 41.6 | 42.2 | 38.1 | | 38.2 | 42.9 | 36.1 | 31.5 | 34.3 | 37.1 | 35.6 |
| W15-219SST/ 70 | Z-9 | 2 | | | | | | | | | | | | | | | | | | | | | 7.7 | 7.0 |
| CPT-18/ 75 ft | Z-9 | 2 | | | | | | | | | | | | | | | | | | | | | 16.0 | 17.7 |
| W15-92/ 82 ft | Z-9 | 2 | ----- (a) | 42.5 | 38.1 | 35.7 | 23.4 | 21.2 | 19.0 | 29.8 | 25.5 | 23.5 | 25.5 | 26.5 | 28.7 | 1.2 | 6.1 | 1.9 | 51.0 | 19.9 | 47.1 | 2.4 | 55.0 | 1.5 |
| W15-95/ 82 ft | Z-9 | 2 | ----- (a) | 8.3 | 7.6 | 9.0 | 11.2 | 12.0 | 14.5 | 13.2 | 21.2 | 21.7 | 23.7 | 27.4 | 28.5 | 1.1 | 30.2 | 30.6 | 39.1 | 32.1 | 35.5 | 42.8 | | |
| CPT-21A/ 86 ft | Z-9 | 2 | 66.6 | 12.6 | 123 | 90.7 | 133 | 123 | 141 | 113 | 195 | 186 | 169 | 189 | 175 | 164 | | 148 | 181 | 153 | 172 | 121 | 188 | 139 |
| CPT-28/ 87 ft | Z-9 | 2 | 49.3 | 151 | 105 | 104 | 170 | 180 | 161 | 69.7 | 205 | 165 | 174 | 214 | 195 | 127 | | 135 | 197 | 146 | 188 | 121 | 224 | 148 |
| W15-85/ 92 ft | Z-9 | 2 | | | | | | | | | | | | | | | | | | | | | 51.3 | 18.8 |
| W18-152/ 113 ft | Z-12 | 2 | | | | 1.8 | 22.1 | 24.7 | 17.7 | 3.7 | 22.9 | 3.1 | 1.8 | 13.7 | 5.2 | 2.9 | | 5.2 | 5.2 | 3.8 | 8.0 | 2.3 | | |
| W15-217/ 115 ft | Z-9 | 3 | 68.6 | 267 | 26.3 | 204 | 317 | 370 | 400 | 92.0 | 442 | 358 | 185 | 432 | 249 | 130 | 105 | 205 | 290 | 160 | 339 | 86.5 | 360 | 124 |
| CPT-24/ 118 ft | Z-9 | 3 | | | | | | | | | | | | | | | | | | | | | 35.2 | 14.2 |
| W15-220SST/ 118 | Z-9 | 3 | | | | | | | | | | | | | | | | | | | | | 34.0 | 17.6 |
| W18-158J/ 123 ft | Z-1A | 3 | | | | 79.6 | 103 | 134 | 132 | 152 | 134 | 196 | 186 | 151 | 141 | 176 | | 164 | 197 | 239 | 200 | 284 | | |
| W18-167/ 123 ft | Z-1A | 3 | | | | 88.8 | 115 | 144 | 109 | 104 | 248 | 227 | 216 | 167 | 174 | 171 | | 136 | 166 | 166 | 135 | 97.2 | | |
| W15-219SST/ 130 | Z-9 | 4 | | | | | | | | | | | | | | | | | | | | | 54.4 | 40.1 |
| W18-249/ 134 ft | Z-18 | 3 | | | | 74.8 | 132 | 173 | 149 | 60.0 | 176 | 137 | 78.3 | 154 | 95.2 | 51.0 | | 49.2 | 123 | 52.1 | 125 | 46.7 | | |
| W18-248/ 136 ft | Z-1A | 3 | | | | 130 | 98.7 | 85.5 | 110 | 130 | 183 | 186 | 170 | 184 | 202 | 177 | | 169 | 175 | 214 | 164 | 178 | | |
| W15-219SST/ 155 | Z-9 | 5 | | | | | | | | | | | | | | | | | | | | | 43.6 | 4.1 |
| W15-220SST/ 185 | Z-9 | 5 | | | | | | | | | | | | | | | | | | | | | 14.5 | 12.5 |
| W15-9J/ 189 ft | Z-9 | 6 | ----- (a) | 10.3 | 1.1 | 8.6 | 12.0 | 12.1 | 14.4 | 9.0 | 12.3 | 11.9 | 11.0 | 20.4 | 10.1 | 5.9 | 5.5 | 8.8 | 8.3 | 5.8 | 5.2 | 1.4 | (d) | |

(a) sample pump failure

(b) Sampler comment: The well caps were off on wells W15-95 and W15-82. In addition, wells W15-217 and W15-9L are suspected according to sample results to be undergoing maintenance. These wells will be retested on 11/01/00.

VJR note: Believe that well caps were off as a result of downhole video survey conducted on 10/31/00 in W15-82, W15-84, W15-95 to support well deepening for PITT.

(c) Sampler comment: W15-217, W15-9L, and W15-82 show readings that are lower than expected. Well W15-95 appears to have returned to normal. Well caps were back on wells on 11/01/00 during sampling.

VJR note: drift (straightness) test conducted on 11/2/00 in W15-82, W15-84, W15-95.

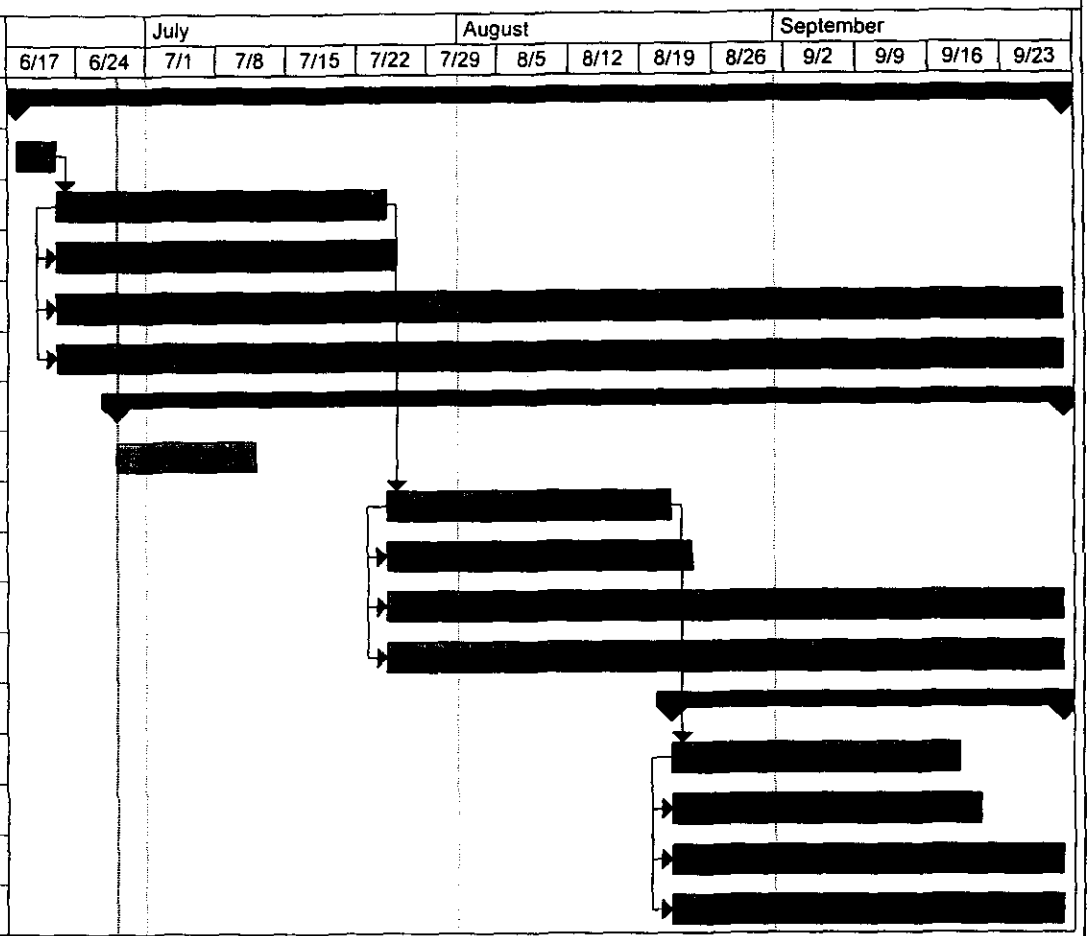
VJR note: follow-up downhole video survey conducted on 11/7/00 in W15-82, W15-84, W15-95.

(d) tubing cut.

Attachment 7

# 200-TW-1 and 200-TW-2 Drilling Schedule (FY01)

| ID | Task Name | Duration | Start | Finish |
|---|---|---|---|---|
| 1 | **216-T-26 Crib** | **75 days** | **Mon 6/18/01** | **Fri 9/28/01** |
| 2 | Mobilization | 4 days | Mon 6/18/01 | Thu 6/21/01 |
| 3 | Borehole Drilling | 23 days | Fri 6/22/01 | Tue 7/24/01 |
| 4 | Sampling | 24 days | Fri 6/22/01 | Wed 7/25/01 |
| 5 | Laboratory Analysis | 71 days | Fri 6/22/01 | Fri 9/28/01 |
| 6 | Waste Management | 71 days | Fri 6/22/01 | Fri 9/28/01 |
| 7 | **216-B-38 Trench** | **67 days** | **Thu 6/28/01** | **Fri 9/28/01** |
| 8 | Drive Casings | 10 days | Thu 6/28/01 | Wed 7/11/01 |
| 9 | Borehole Drilling | 20 days | Wed 7/25/01 | Tue 8/21/01 |
| 10 | Sampling | 22 days | Wed 7/25/01 | Thu 8/23/01 |
| 11 | Laboratory Analysis | 48 days | Wed 7/25/01 | Fri 9/28/01 |
| 12 | Waste Management | 48 days | Wed 7/25/01 | Fri 9/28/01 |
| 13 | **216-B-7A Crib** | **28 days** | **Wed 8/22/01** | **Fri 9/28/01** |
| 14 | Borehole Drilling | 20 days | Wed 8/22/01 | Tue 9/18/01 |
| 15 | Sampling | 22 days | Wed 8/22/01 | Thu 9/20/01 |
| 16 | Laboratory Analysis | 28 days | Wed 8/22/01 | Fri 9/28/01 |
| 17 | Waste Management | 28 days | Wed 8/22/01 | Fri 9/28/01 |




Project: Project1
Date: Thu 6/28/01

Task
Split
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Split
Rolled Up Milestone
Rolled Up Progress
External Tasks
Project Summary